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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/259,420	02/26/1999	TYLER R. DAWSON	834DAW	5276

7590 11/30/2001

JAMES M. LEAS, ESQ.
37 BUTLER DRIVE
SOUTH BURLINGTON, VT 05403

EXAMINER

MALCOLM, TOMLYNE A

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 11/30/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/259,420

Applicant(s)

DAWSON, TYLER R.

Examiner

Tomlyne A Malcolm

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20,23-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5,12-22,25,34-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 6-11,23,24 and 26-33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The indicated allowability of claims 1-20 and 23-36 and 38 are withdrawn in view of the newly discovered reference(s) to Siner, U.S. Patent No. 5,762,439. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,3,5,12,13,21,22,25,34-36,38 are rejected under 35

U.S.C. 102(b) as being anticipated by Siner, U.S. Patent No. 5,762,439.

In regards to claim 1, Siner discloses a hub comprising a first opening (Fig.5) extending axially into the hub the first opening comprising an inner surface for disposing the hub on the shaft, the first opening having a first end and a second end; an integral key (26) extending radially inward from the inner surface of the first opening, the integral key extending at least part of the way along the inner surface between the first end and the second end for engaging the keyway for preventing relative rotation between the hub and the shaft when

the hub is disposed on the shaft; and an integral stop (22) extending across at least a portion of the first end for preventing the shaft from extending beyond the hub when the hub is disposed on the shaft.

In regards to claim 2, the integral key extends from the first end to the second end of the first opening.

In regards to claim 3, a second opening extending through the integral stop (Fig.5), the second opening communicating with the first opening.

In regards to claim 5, the second opening is at least partially aligned with the integral key (Fig.5).

In regards to claim 12, the second opening is circular and the second opening has a diameter smaller than the first opening (Fig.5).

In regards to claim 13, the second opening is concentric with the first opening (Fig.5).

In regards to claim 21, Siner discloses a hub comprising a first opening (Fig.5) extending axially into the hub the first opening comprising an inner surface for disposing the hub on the shaft, the first opening having a first end and a second end; an integral stop (22) extending across only a portion of the first end, the integral stop for preventing the shaft from extending beyond the hub when the hub is disposed on the shaft.

In regards to claim 22, further comprising means integral (26) with the inner surface of the first opening for preventing relative rotation of the hub on the shaft when the hub is disposed on the shaft.

In regards to claim 25, means integral with the inner surface comprising one or more splines.

In regards to claim 34, a hub comprising a first face and a second face (Fig.5), an opening extending there between, the opening having a length between the first face and the second face, the opening comprising an inner surface, and integral key (26) extending radially inward from the inner surface the integral key extending at least part of the way between the first face and the second face, the opening and the integral key for receiving a shaft having a keyway, the hub further comprising an integral stop (22) extending across at least a portion of the opening for preventing the shaft from extending beyond the hub when the hub is disposed on the shaft.

In regards to claim 35, an integral stop (22) extending across a portion of the opening for preventing the shaft from moving beyond the integral stop.

In regards to claim 36, a hub comprising a mounting surface (the outer area of 19), a first face and a second face and an opening extending from the first face toward the second face, an integral stop (22) extending across a portion of the opening.

In regards to claim 38, the integral key (26) extends substantially the entire length of the opening.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,14-16,17-20,26-30 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siner, as discussed above in view of Johnson, U.S. Patent No. 4,525,094 in further view of Conyngham, U.S. Patent No. 1,391,719 and still in further view of Malone, U.S. Patent No. 5,720,685.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siner, as discussed above. It would have been obvious to one of ordinary skill in the art to modify Siner to include a shaft having a tapped hole in the end as a form of retaining means to keep the shaft from sliding out of the hub.

In regard to claims 14-16, claim 14 is a product by process claim and is not given patentable weight, since claims 15-16 further limits claim 14, they are also rejected. However, Johnson, U.S. Patent No.4,525,094, powdered metal elements are well known in the art.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siner in view of Conyngham, U.S. Patent No. 1,391,719. Conyngham teaches the use of set screws (18) is well known in the art. It would have been obvious to one of ordinary skill in the art to modify the hub disclosed in Siner to include a

hole tapped with internal threads for a set screw if it was necessary to connect the hub to another structure such as a shaft.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siner as discussed above, in view of Malone, U.S. Patent No. 5,720,685 . Malone teaches a disk-shaped body (12) having a rim formed with a peripheral recess (16) for receiving a pulley belt (18), the disk-shaped body is affixed to a hub (Fig.1 and Fig.2). It would have been obvious to one of ordinary skill in the art to modify Siner in view of Malone if the combination of a pulley and a hub was desired. It would have been obvious to weld or press the pulley to the hub if there is a need to have them permanently joined together.

Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siner as discussed above . A hub having an outer peripheral surface portion having a right circular cylindrical, pyramidal, elliptical cylindrical, conical or splined form would have been obvious to one of ordinary skill in the art as a matter of design choice since they all perform the same function of preventing the engaged shaft from rotating.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siner in view of Westlake, U.S. Patent No. 4,043,214. Westlake teaches a disk-shaped body (14) having a rim formed with gear teeth (32), the disk-shaped body being affixed to a hub (12). It would be obvious to one of ordinary skill in the art to modify the hub taught in Siner to include a gear as taught by Westlake if that

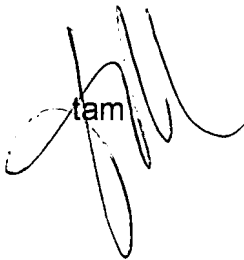
combination was desired. It would have been obvious to weld or press the pulley to the hub if there is a need to have them permanently joined together.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomlyne A Malcolm whose telephone number is 703-305-1566. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne, can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.



tam



Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600